

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019018**Date Inspected:** 12-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr.Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

This QA Inspector randomly observed the following work in progress.

**OBG 13EAST**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 216086 performing the Shielded Metal Arc Welding process on weld 101 located at PCMK SEG3007U. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Weld repair report identified as B-WR17725.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 200113 performing the Shielded Metal Arc Welding process on weld 035 located at PCMK SEG3007D. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Fcm-Repair-1. Weld repair report identified as B-WR18480.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068097 performing the Shielded Metal

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Arc Welding process on weld 024 located at PCMK SEG3007Y. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067609 performing the Shielded Metal Arc Welding process on weld 022 located at PCMK SEG3007AD. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037723 performing the Shielded Metal Arc Welding process on weld 023 located at PCMK SEG3007AD. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044774 performing the Shielded Metal Arc Welding process on weld 020 located at PCMK SEG3007AD. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050242 performing the Shielded Metal Arc Welding process on weld 021 located at PCMK SEG3007AD. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044824 performing the Flux Cored Arc Welding process on weld 006 located at PCMK FB3162C-001. ZPMC QC Mr. Zhen Hui Feng was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-Repair-1. Weld repair report identified as B-WR18070.

This Quality Assurance (QA) Inspector observed ZPMC personnel performing Ultrasonic Testing for the weld between floor beam (FB3158) to the "T" rib stiffener. Weld number identified as SEG3011G-130. This QA Inspector observed ZPMC personnel discovered a rejectable indication.

### OBG 14 EAST

This Quality Assurance (QA) Inspector observed erection of the floor beam LD3040 was in progress in lift 14 east.

### OBG 14WEST

This Quality Assurance (QA) Inspector observed ZPMC personnel performing heat straightening, member identified as DP3176A and DP3177A. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Li Ming Yang was present to monitor the heat straightening process. Weld number identified as SEG3020\*-010. The heat straightening appeared to comply with heat straightening Report HSR1 (B)-9929.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.



## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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